BEFORE THE DIVISION OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES IN AND FOR THE STATE OF UTAH

FILED MAR 1, 0 2000

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SECRETARY, BOARD OF OIL, GAS & MINING

IN THE MATTER OF THE PETITION

FILED BY THE DIVISION OF OIL, GAS

AND MINING FOR AN ORDER

REQUIRING IMMEDIATE RECLAMATION:

OF THE TINTIC PROJECT SITE BY

NORTH LILY MINING COMPANY,

JUAB COUNTY, UTAH

NOTICE OF AGENCY ACTION

DOCKET NUMBER 2000-004

CAUSE NO. M/023/007

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The Division of Oil, Gas and Mining ("Division"), hereby petitions the Board of Oil, Gas and Mining, for an Order requiring the operator of the Tintic Project, located in the NW 1/4, Section 35, Township 10 South, Range 3 West, SLBM, Juab County, to begin immediate reclamation of the Tintic Project site subject to approval by the Division and other state and federal agencies having jurisdiction over the operation. The operator of record is North Lily Mining Company (North Lily).

JURISDICTION

- 1. This action is brought by the Division pursuant to Utah Code Annotated 40-8-1 et seq (1953, as amended).
- Jurisdiction over this matter is conferred upon the Board of Oil, Gas and Mining ("Board") by Utah Code Annotated sections 40-8-6 and 40-8-8 (1953, as amended).

NOTICE REQUIREMENTS

- 1. Pursuant to Sections 63-46b-6 to 63-46b-11 of the Utah Code Annotated (1953, as amended), the hearing will be conducted formally.
- 2. The hearing will be held on April 26, 2000, at 10:00a.m. Any party who fails to appear at said hearing may be held in default.
- The names and addresses of all persons to whom Notice of Agency Action shall be given are attached as EXHIBIT "1" and by this reference incorporated herein.

STATEMENT OF THE CASE

North Lily has failed to comply with Utah Statute, Utah Mined Land Reclamation Act 40-1-1 et. seq. (Act), the Minerals Rules, sections R647-1 through R647-5, the approved Notice of Intention M/023/007, and the mitigation requirements as described in the Division's October 12, 1999, Notice of Non-Compliance (NON) and November 16, 1999, Finding of Non-Compliance (FON).

STATEMENT OF THE FACTS

- 1. On August 18,1999, Division staff inspected this site and determined that there were violations of the Act and Rules due to North Lily's failure to maintain the integrity of ponds, ditches, and liners. The report of this inspection is attached as Exhibit 2.
- 2. On September 9,1999, this Division and the Division of Water Quality (DWQ) inspected the site in the company of a North Lily representative, and made findings regarding the environmental hazards at the site. The inspection report is attached as Exhibit 3.
- 3. On October 12, 1999, the Division issued a Notice of Non-Compliance (NON). This Notice directs North Lily to comply with Mitigation Requirements to submit a detailed plan within 30 days and to correct the environmental hazards at the site. This NON is attached as Exhibit 4.
- 4. On October 21, 1999, the Division received a response to the Notice of Non-Compliance from North Lily which challenged the Division's findings and made certain representations about work performed at the site. This letter is attached as Exhibit 5.
- 5. On November 10,1999, the Division provided an opportunity for North Lily to contest the NON dated October 12, 1999. At this time, North Lily made affirmative representations concerning the cyanide heap leach operation.
- 6. On November 16, 1999, the Division issued a Finding of Non-Compliance (FON) based upon the information provided in the November 10, 1999 meeting. The Finding upheld the NON previously issued and required North Lily to address critical environmental issues at the site and provide a plan. That letter is attached as Exhibit 6.
- 7. On November 22, 1999, the Division received a letter from North Lily which challenged findings in both the October 12, 1999 NON and the November 16, 1999 FON. That letter made affirmative statements in regard to addressing issues described by the NON and the FON. North Lily's November 22, 1999 letter is attached as Exhibit 7.
- 8. On November 24, 1999, Division and DWQ staff inspected the site. This inspection found that conditions as described in the NON still existed. That inspection report is attached as Exhibit 8.

9. On December 7, 1999, the Division inspected the site, and found that the likelihood of environmental harm still remained at the site. That inspection report is attached as Exhibit 9.

10. On February 14, 2000, the Division and DWQ inspected the site and found that the requirements set forth in the NON and FON has not been substantially addressed. That report is attached as Exhibit 10.

COUNT I

The Division incorporates by reference paragraphs 1 through 10 of the above Statement of Facts.

The operator of record, North Lily, has failed to comply with the statute (Utah Code Annotated 40-8-12), the rules (R647-4-107), and the requirements of the NON and the FON issued by the Division. This failure to comply with statutes, the rules, and the NON and the FON is a failure to meet the objectives of the Utah Mined Land Reclamation Act, and requires an order of the Board allowing the Attorney General to bring action against the operator because of the likelihood that environmental harm will occur.

COUNT II

The Division incorporates by reference paragraphs 1 through 10 of the above Statement of Facts.

The operator of record, North Lily, through its written statements and failure to meet regulatory obligations has supplied statements which are materially false, which constitutes a violation of Utah Code Annotated 40-8-9 (1953, as amended), and is a willful and/or knowing evasion of the Utah Mine Land Reclamation Act.

PRAYER FOR RELIEF

WHEREFORE, The Division requests that the Board enter the following order:

- A. North Lily must immediately reclaim the entire area subject to the approved NOI, M/023/007, subject to approval by the Division and other appropriate state and federal regulatory agencies having jurisdiction in the matter.
- B. And, make a finding that North Lily has willfully and knowingly made false statements and authorize the Attorney General to seek legal penalties under Utah statute 40-8-9, UCA 1953 as amended.

/--_ day of March, 2000. REQUESTED this _/O

Lowell P. Braxton, Director
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210

P.O. Box 145801

Salt Lake City, Utah 84114-5801

Telephone: (801) 538-5340

EXHIBIT 1 CERTIFICATE OF SERVICE

I hereby certify that I caused a true and correct copy of the foregoing NOTICE OF AGENCY ACTION, for Docket No.2000-004, Cause No. M/023/007, to be mailed by first class mail, postage prepaid, the __10th__ day of March 2000 to the following:

- CERTIFIED MAIL P 074 976 819
 Stephen E. Flechner, President and CEO
 North Lily Mining Company
 1800 Glenarm Place, Suite 210
 Denver, Colorado 80202
- Gene Webb
 North Lily Mining Company
 1800 Glenarm Place, Suite 210
 Denver, Colorado 80202
- 3. Tom Mitchell
 Assistant Attorney General
 160 East 300 South 5th Floor
 P.O. Box 140857
 Salt Lake City, Utah 84114-0857
- Don A. Ostler, Director
 Division of Water Quality
 288 North 1460 West
 P.O. Box 144870
 Salt Lake City, Utah 84114-4870

Tiffini Moss

Executive Secretary

EXHIBIT 2

Michael O. Leavitt Governor Kathleen Clarke Executive Director Lowell P. Braxton Division Director 1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax) 801-538-7223 (TDD)

September 7, 1999

TO:

Minerals File

FROM:

D. Wayne Hedberg, Permit Supervisor and Doug Jensen, Reclamation Specialist

RE:

Site Inspection, North Lily Mining Company, Tintic Heap Leach Project, M/023/007,

Juab County, Utah

Date of Inspection:

August 18, 1999

Time of Inspection:

4:15 - 4:45pm

Conditions:

Sunny, clear and warm

Participants:

Wayne Hedberg, and Doug Jensen, DOGM

Purpose of Inspection: To evaluate onsite conditions of this suspended heap leaching operation.

A brief, unscheduled inspection was performed by Division staff to observe the status of onsite conditions at this suspended heap leaching operation. No project personnel were on the property during our inspection. The gate leading to the heap leach pad area and the processing ponds was wide open, giving direct unrestricted access to the site. Drain down solutions from the pregnant and barren ponds were being pumped back up onto the north end of the heap via a 4-inch line. A number of sprinklers were spraying the recycled solution into the air above the heap to enhance evaporation of the residual pond solutions. One or two sprinkler heads were apparently broken as solution was shooting straight up like a fountain from one or two locations. It appeared that the drain down solution was coming off the heaps nearly as fast as it was being recycled back up onto the heap. The pregnant pond was at least 3/4 full and the barren pond was estimated to be ½ full of solution. The solution in the ponds was the color of strong tea. The makeup water pond was 1/4 or less full.

Heavy salt encrustation has occurred on the surface of the heap near the discharge area of the sprinkler lines. A strong sulphur smell was noted around this sprinkler discharge area as well. A number of areas were noted where runoff from the sprinkler distribution system has eroded rills and gullies into the heap. Photos were taken of the heavily eroded areas. A few wash outs were also observed on the heap where crushed ore has washed downslope into the exterior solution conveyance channels. The solution channels are nearly full (to overflowing) of eroded heap material in many locations. A heavy precipitation event would likely cause a breach of these channels allowing uncontrolled discharge into adjacent undisturbed areas.

Page 2 Site Inspection M/023/007 September 7, 1999

Cracks and tears were noted in the pond and solution channel primary liners in many areas. It was not evident if the secondary liners were also damaged or deteriorating. A recent range fire has burned the native vegetation right up to the edge of the security fence at the south end of the heap. We checked the security of the doors in the office trailer and the processing facilities building. All doors were appropriately locked. We were unsure how often the site was being visited by the caretaker assigned to watch over and maintain this site. We had some concern over the possibility that the pump(s) could be left running for long periods of time with no one onsite to watch for and correct problems that might develop.

A number of photos were taken to document the current conditions of the site.

jb cc:

Gene Webb, North Lily Mining Co.

Dennis Frederick, DWQ Mary Ann Wright, DOGM

m023007.memo

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

EXHIBIT

September 14, 1999

TO:

Minerals File

FROM:

Kathleen Clarke

Executive Director

Lowell P. Braxton

Division Director

Doug Jensen, Reclamation Specialist

RE:

Site Inspection, North Lily Mining Company, North Lily Project, M/023/007, Juab

County, Utah

Date of Inspection:

September 9, 1999

Time of Inspection:

0900

Conditions:

Warm and Clear

Participants:

Gene Webb, Elwin Ewell, North Lily Mining; Beth Wondimu, Arnie

Hultquist, DEQ; Tom Munson, and Doug Jensen DOGM

Purpose of Inspection: To take water samples and discuss possible noncompliance issues with North

Lily Mining Company.

We were scheduled to meet at the site at 0900. Tom and I arrived about a half an hour early so we parked above the site in the topsoil storage area. The watchman (Elwin) was at the site when we arrived.

Three old transformers have been placed in the area where we parked. All the copper components have been removed from them and an oil residue is evident in the area around them. One case has been filled with dirt (which is now oil soaked) and one still contains some liquid. These transformers are a concern, as they appear to be an older vintage and possibly contain PCBs.

We accessed the heap from a gate on the back fence to check new sprinklers which had been placed on site since our last inspection. All the sprays that were running during our August 18. 1999 visit were still in operation, in addition another 7 to 8 sprays had been added. Due to the concentration, type & number of sprays, and length of 3/8" supply lines, it is unlikely that evaporation is taking place. With the cooler days and nights, the possibility of evaporating solutions to reduce water inventory has passed.

Several of the new sprays had been placed along the South (back) edge of the pad. There was evidence that the water from these sprays had started to form rills which was carrying small amounts of water off the pad. This is due to the fact that the solution conveyance systems (ditches) had been filled when the pad was recontoured.

Page 2 Site Inspection M/023/007 September 14, 1999

As we returned to the truck, I discovered a sheep carcass that had died inside the enclosure fence since the recontouring had taken place.

As we drove to the office trailer we encountered Beth and Arnie (DEQ) arriving at the site. Beth indicated that they were there to take water samples and walk the site to assess the problems that had been noted during DOGM's August 18 inspection. Gene Webb was at the trailer awaiting our arrival. Elwin Ewell (watchman) was attempting to patch one of the numerous holes in the ditch primary liner. The areas that he was attending to was some of the larger holes in the bank of the ditch. There were numerous smaller holes in evidence near the solution flows that should have been of more concern.

One of the sample points DEQ wanted to sample was the monitor wells that were placed between the primary and secondary liners of the ponds. I explained that due to the number and size of the holes in the primary liners, the solutions in the ponds were probably similar to the wells. A sample of the barren pond was taken.

We toured the site indicating to Beth the areas that DOGM had viewed as a concern during the initial visit. We checked the monitor wells that had been placed under the pad ditches to indicate leakage. None of the wells we checked contained water, but all the measuring pipes inside the wells had salt encrustation on them indicating that there had been water in the wells at some time. One of the wells had been destroyed when the heap had been recontoured, the site of this well was surrounded with solution. There was evidence that solutions had been entering this hole.

Beth and I walked along the lower ditch and viewed the areas where breaches had occurred in a berm above the ditch and solution had flowed off the heap. Elwin indicated that these breaches had occurred during a storm some time ago. The ditches had not been cleaned so if there is another event those solutions will flow off the site.

After we looked at the spray arrangement on the pads, we walked down towards the preg pond. There was an area of mud outside the containment area that had been caused by solutions flowing off the heap, with no ditches to contain it.

Both the preg and barren ponds had numerous holes that could be seen during our tour. Some of these were rips two to three feet long. The liners on this site appear to be one of the PCV types that are subject to UV degradation. All the seams are glued by hand with a cement similar to the older Hypolon liners used in the '80s. We were unable to discern if there were holes below the surface due to a dark colored silt that cover the areas below water level. But some of the tears that were above the water level could be seen to extend below the water line. Both these ponds were approximately 3/4 full.

We next looked at the overflow pond. The primary liner in this pond has been completely destroyed and the remains are lying in the bottom of the pond. The seams of the secondary liner have areas where the glue had degraded and left areas of possible infiltration if the water was to

Page 3 Site Inspection M/023/007 September 14, 1999

reach the level of the holes. One problem of this particular pond design is that there is not monitor wells in the clay containment below the secondary liner to monitor for leaks. The spillway between the preg and the overflow has several large holes and there is salt encrustation indicating that solution has been allowed to flow through these holes. The water levels of the preg and barren ponds and the present condition of the overflow pond and spillway are of concern. Gene Webb indicated that North Lily could possibly replace the liner in some of the ponds. DEQ sampled the water in the overflow pond.

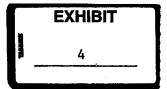
In the area of the bridge between the preg and barren pond there was a dead mourning dove in the spillway. This is the same area where we had seen a dead blue bird on our last visit. The toxicity of these solutions are a definite concern, as there is evidence that other animals have visited the site.

We next toured the plant, which still contains most of the components used during operation, with the exception of the refinery which has been removed. Gene indicated that with the low metal prices and the age of the equipment, disposal of these components has not taken place.

DEQ had taken the samples that they wanted and we had discussed the areas of concern with Mr. Webb, so we departed.

jb cc: Gene Webb, North Lily ins-M23-07-2.wpd Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax) 801-538-7223 (TDD)



October 12, 1999

CERTIFIED RETURN RECEIPT P 074 976 765

Mr. Gene Webb North Lily Mining Company 1800 Glenarm Place, Suite 210 Denver, Colorado 80202

Re: Notice of Non-Compliance, North Lily Mining Company, Tintic Project, M/023/007, Juab County, Utah

Dear Mr. Webb:

This letter is sent to formally notify you that your Tintic Project, Division file M/023/007, is not in compliance with certain sections of the Utah Mined Land Reclamation Act 40-8-1 et. seq. (Act) and the Minerals Reclamation Program Rules sections R647-1 through R647-5.

On September 9,1999, Division staff and the Division of Water Quality (DWQ) staff performed an inspection of this operation. The purpose of the inspection was to assess the continued deterioration of the pond liners and the general lack of maintenance of the site. The information collected during this inspection included visual observations, photos and water quality data collected by DWQ. This inspection was a follow-up to the Division's August 18, 1999 inspection.

It appears that recycled process solutions are leaving the site through torn/punctured pond and solution conveyance channel liners. In addition, the overall deteriorated site conditions and lack of proper site maintenance may have likely contributed to offsite surface discharges of solutions and sediments. Therefore, it is the Division's position that these conditions present a significant public health and safety concern and pose a serious potential for additional environmental damage. This Notice of Non-Compliance is subsequently warranted.

Finding of Non-Compliance

Violated rules:

1. <u>Section R647-4-107.1 Operation Practices</u> - requires the operator to minimize hazards to the public safety and welfare. Due to the presence of dead animals noted during recent staff inspections (2 dead birds and a dead sheep), the questionable water quality of the pad effluent, and

Page 2 Gene Webb M/023/007 October 12, 1999

the insecure nature of the site (wide open gates leading to process ponds and heap), the Division feels public safety and welfare is compromised.

2. R647-4-107.2. Drainages - requires the operator to take appropriate measures to avoid or minimize environmental damage to natural drainage channels. To date, there have been a number of unauthorized releases of contaminated water leaving the process water ponds and traveling offsite through a culvert located west of the site and under State Highway 6 to adjacent undisturbed areas.

<u>Process Ponds</u> - Given the current deteriorated condition of the process ponds (and the volume of impounded solutions), it is doubtful that these facilities will successfully retain the amount of additional effluent/runoff that may be produced when a significant precipitation event (or spring snowmelt) occurs. We believe that the capacity and integrity of these containment facilities will be breached leading to uncontrolled discharges of solutions.

- 3. R647-4-107.3. Erosion Control there is evidence of significant erosion on the heap leach pad where processed, contaminated ore has slumped blocking the solution conveyance ditches. This is causing potential environmental and heap stability problems and uncontrolled discharge of process solutions.
- 4. R647-4-107.4. Deleterious Materials deleterious material (i.e. pad effluent) is potentially leaving the site by way of compromised liners both associated with the pad and the process water ponds. The presence of several opened electrical transformers on the east side of the heap leach pad raises the question of possible PCB contamination.

Location of Non-Compliance

The location of the site is on the east side of State Highway 6 in the NW 1/4, Section 35, Township 10 South, Range 3 West, SLBM, Juab County, Utah.

Mitigation Requirements

- Within 30 days, North Lily Mining Company must submit a detailed plan describing how the
 company will stabilize and maintain the site to address the findings of Non-Compliance as outlined
 above. A time frame for accomplishing each step of the plan to address the issues of NonCompliance must be included.
- The plan should include, but not be limited to addressing the following concerns:
 - Water balance calculations that estimate the amount of water currently held in the heap and ponds. A demonstration that the ponds will adequately contain all existing solutions plus any additional draindown or runoff caused by a significant rainfall event(s) and any spring snowmelt.

Page 3 Gene Webb M/023/007 October 12, 1999

- Plans for treating and/or disposing of the process water pond solutions presently contained in the ponds. A plan for correcting the structural integrity of the pond and pad liners to allow continued use, or an alternate plan for collection, storage and treatment of these solutions.
- PCB testing for the electrical transformers and an appropriate disposal plan for same. Any residual contaminated soil material surrounding the transformers should also be removed and properly disposed of.

Consequences of Continued Non-Compliance

- North Lily's failure to comply with the mitigation requirements within the time frame specified in this Notice will result in issuance of a formal Notice of Agency Action. This action may require you to appear at a formal hearing before the Board of Oil, Gas and Mining. After Notice and Hearing, the Board will issue an abatement or compliance order which may require: immediate reclamation of all mining-related disturbances, and/or other lawful requirements as authorized under the Act.
- The Board may also choose to bring suit against North Lily Mining Company in a local court seeking restraining orders, injunctions, and /or the judicial assessment of appropriate civil penalties, not to exceed \$10,000 per day (per violation) for a finding of willful and knowing violation of the Act.

If you wish to contest this Notice of Non-Compliance, you may contact the Division within 10 days of your receipt of this notice to schedule a meeting before the Associate Director and appropriate members of the Minerals Program staff. Please contact Tiffini Moss, Executive Secretary, at (801) 538-5304 if you choose to arrange this meeting with the Associate Director. If you have any questions regarding this Notice you may contact me at (801) 538-5286 or Tom Munson at (801) 538-5321.

Sincerely,

D. Wayne Hedberg Permit Supervisor

Minerals Regulatory Program.

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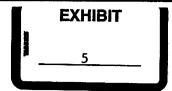
Enclosure: Inspection Memo(9/9/99)

cc: Tom Gast, EMS

Dennis Frederick, DWQ

Mary Ann Wright, Associate Director, DOGM

o:\action\m023007.ncl



Suite 210

1800 Glenarm Place

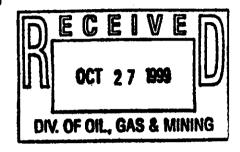
Denver, CO 80202

Tel: 505.294.0427

Fax: 505.295.2255

October 21, 1999

Mr. D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program
State of Utah
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt LakeCity, Utah, 84114



Re: Notice of Non-Compliance, North Lily Mining Company, Tintic Project M/023/007, Juab County, Utah dated October 12, 1999

Dear Mr. Hedberg;

Your letter of Non-Compliance was received with concern and disappointment. North Lily Mining Company has always attempted to operate in a responsible manner, and in accord with applicable regulations, rules, stipulations, and permit conditions. Prior to receipt of your letter, we believed that North Lily maintained a good, cooperative working relationship with DOGM and had been responsive to the concerns of your group. During this period of unfavorable business conditions, North Lily has successfully reclaimed disturbance from our mining operations and we have been released from further obligation for these (Tom Munson letter dated June 3, 1998).

The company has made good progress toward closure and reclamation of the Silver City heap leach facility with a closure plan approved by Division of Water Quality, and heap grading and burial of solution return piping having been completed to date. The remaining tasks include: DWQ approval of the design of a biopass system, construction of the biopass system, final grading of the heap to repair minor areas of slumping, removal of surface facilities, disposal of solutions, placement of top soil and seeding. It was the company's intention to complete these tasks during the summer and fall of 1999.

In the spring of 1999, a qualified firm was retained to conduct feasibility studies regarding the biopass system design. In their final feasibility report, the contractor stated: "Using data generated in the column testing, Compliance Technology, Inc. can design a full-scale system for treating the drain down of the Silver City heap leach pad." North Lily learned that the contractor was no longer in business when it called the contractor in

August to discuss the feasibility report and to commission the design studies, which would have been forwarded to DWQ for review and approval.

Because it was not possible to retain a replacement contractor, complete necessary studies, design the biopass system, gain DWQ's approval and construct the system in 1999, North Lily immediately began intensive efforts to lessen the effluent inventory by installation of additional misters and sprinklers. These efforts have been successful with effluent volumes being reduced approximately 25% to about 700,000 gallons from August 18, 1999 to September 9, 1999. In order to provide an additional factor of safety in effluent management, North Lily's consultant, Tom Gast, requested permission of your group and DWQ to land dispose of 1 to 1.5 acre feet of heap effluent yet this fall. Approval of that request would have drawn the effluent inventory to minimal levels. Mr. Gast's requests were denied and North Lily continues to evaporate effluent with significant reductions noted. An important observation is that as the heap was flushed with natural precipitation during the past four years, the company has noticed a meaningful decrease in metals and cyanide concentrations in effluent. TDS concentrations are declining as well, but not as rapidly.

North Lily has carefully reviewed the allegations contained in your October 12, 1999 letter. It is North Lily's belief that while DOGM's opinions stated in the letter must be addressed, a careful review of the facts does not elevate the described situations into valid "Findings of Non-Compliance". Our review follows.

Violated rules:

1. <u>Section R647-4-107.1 Operation Practices</u> - requires the operation to minimize hazards to the public safety and welfare. Due to the presence of dead animals noted during recent staff inspections (2 dead birds and a dead sheep), the questionable water quality of the pad effluent, and the insecure nature of the site (wide open gates leading to process ponds and heap), the Division feels public safety and welfare is compromised.

North Lily maintains the facility such that it does not present a hazard to public safety and welfare. On site staff are employed and we have contracted security since 1995 to regularly check the facility during off hours. Following DOGM's verbal report of the facility gate being open without staff present, the company learned that occasionally a staff person left the facility for brief periods without locking the gate. Staff has been reminded that all gates are to be locked when they are away from the facility, no matter how briefly. We thank DOGM for pointing to the described situation and believe that the company's actions have tightened security such that the facility does not represent a hazard to public safety and welfare.

2. <u>R647-107.2. Drainages</u> – requires the operator to take appropriate measures to avoid or minimize environmental damage to natural drainage channels. To date, there have been a number of unauthorized releases of contaminated water leaving the process water ponds and traveling offsite through a culvert located west of the site and under State Highway 6 to adjacent undisturbed areas.

The company is unaware of any unauthorized releases of contaminated water leaving the process water ponds such that the releases resulted in environmental damage to natural drainage channels. There have been no releases from the process ponds since 1991 (the period of history available to current management). There was a wash out a number of years ago, while the heap was under active leach, which resulted from a broken pipe. Heap material was washed from the pad. This release was properly reported and cleaned up to the satisfaction of DOGM and DWQ. Said again, to our knowledge, there have been no releases from the ponds in the past eight years.

<u>Process Ponds</u> - Given the current deteriorated condition of the process ponds (and the volume of impounded solutions), it is doubtful these facilities will successfully retain the amount of additional effluent/runoff that may be produced when a significant precipitation event (or spring snowmelt) occurs. We believe that the capacity and integrity of these containment facilities will be breached leading to uncontrolled discharges of solutions.

It was North Lily's intention to close the facility this year and maintenance to the pond liners was deferred. Because the biopass contractor was not able to prepare a design in time to gain DWQ's approval, it became necessary to defer the final closure until next year. Once North Lily learned of this, the company began to aggressively evaporate effluent and to repair the pond liners. The company also requested DOGM and DWQ approval to land apply 1.0 to 1.5 acre feet of effluent to provide an added factor of safety. This land application requests were denied but the company continues to successfully evaporate effluent. Frankly, North Lily does not understand the basis for DOGM's contention that "it is doubtful these facilities will successfully retain the amount of additional effluent/runoff that may be produced when a significant precipitation event (or spring snowmelt) occurs" given the fact that there is less than 30% of fluids present in the system today when compared to when the facility was operating.

3. <u>R647-4-107.3. Erosion Control</u> - There is evidence of significant erosion on the heap leach pad where processed, contaminated ore has slumped blocking the solution conveyance ditches. This is causing potential environmental and heap stability problems and uncontrolled discharge of process solutions.

There is some slumping of the graded heap surface that will be repaired as a part of final grading prior to the placement of topsoil on the heap surface. Four-inch pipe was placed into certain of the solution conveyance ditches and covered with clean material per the suggestion of DWQ. This was done to prevent the ditches from clogging and not allowing effluent from flowing to the biopass system(letter dated August 21, 1996 to Dennis Frederick, DWQ with copy to Tom Munson, DOGM). It is believed that DOGM has mistakenly thought that the material in the ditches is the result of slumping rather than having been placed as part of the closure plan.

4. <u>R647-4-107.4. Deleterious Materials</u> - deleterious material (i.e. pad effluent) is potentially leaving the site by way of compromised liners both associated with the pad

and the process water ponds. The presence of several opened electrical transformers on the east side of the heap leach pad raises the question of possible PCB contamination.

As discussed above, North Lily implemented a program of maintenance to repair tears in the pond liners in September. The transformers referenced were tested in 1994 and found to be non-PCB transformers. This information, along with a copy of the PCB test results were forwarded to Wayne Hedberg by fax from Tom Gast on October 6, 1999. In the event that DOGM has not reviewed the information, another copy is included for review.

Location of Non-Compliance

The location of the site is on the east side of State Highway 6 in the NW 4, Section 35, Township 10 South, Range 3 West, SLBM, Juab County, Utah.

The project includes the described area as well as the area on the west side of Highway 6 used for land application (see letter March 5, 1997 from Paul Spor to Dennis Frederick, DWQ with copy to Tom Munson, DOGM).

Request for Reconsideration

North Lily Mining Company requests that DOGM carefully review the information contained in this transmittal and reconsider its Finding of Non-Compliance. In the event that DOGM determines that its Finding of Non-Compliance continues to the in order, North Lily Mining Company respectfully requests to contest the individual findings and wishes to schedule a meeting before the Associate Director and appropriate members of the Minerals Program staff. This letter serves as timely notice of our request to contest.

Please feel free to contact either Tom Gast of Environmental Management Services Company (970/461-0571) or me if additional information can be provided. It is our hope that our working relationship can be restored.

Sincerely,

W. Gene Webb

Executive Vice President

Enclosure: Gast fax dated 10/6/99

Cc:

Tom Gast, EMS

Dennis Frederick, DWO

Mary Ann Wright, Associate Director, DOGM

EMS
1413 West 57th Street
Loveland, CO 80538
970/461-0571 fax 970/461-0591
e-mail: TGast99@aol.com

FRESIDE LEGISLET FRE

То:	D. Wayne Hedberg	Fax	801/359-3940	
From:	Tom Gast	Date	: 10/6/99	
Re:	North Lily PCB Test R	esuits Pag	es: 4 pgs	
CC:	Steve Flechner / Gene	Webb		
Ci Urger	nt X For Review	☐ Please Commo	ent 🔲 Please Reply	☐ Please Recycle

Following are the PCB test results for the transformers noted during the course of DOGM's recent inspection of the North Lily facility. Please contact me with any questions.

Tom Last

Memo To:

File

From:

Tom Gast

Date:

November 9, 1994

Subject:

Silver City PCB Test Results

Samples were obtained from the four pieces of electrical equipment stored by North Lily at Silver City on October 19, 1994. The samples were submitted to Utility Testing Laboratory of Salt Lake City and the PCB content was tested as required by EPA and Utah regulation. Samples were taken from the following pieces of equipment:

Sample No.	Serial No.	Description
NL#1	NSN	Transformer
NL #2	19590	Transformer 100 kya 2400/240-480
NL #3	NSN	Oil Switch
NL #4	19600	Transformer 100 kva 2400/240-480

Results: No PCB's were detected in samples 1, 2 or 3. Sample 4 contained 1.5 mg/kg PCB which is just above the detection limit of 1.0 mg/kg PCB.

Regulatory Effect: EPA classes PCB content as follows:

- >500 ppm PCB PCB Transformer
- >50 ppm, <500 ppm PCB PCB Contaminated Transformer
- <50 ppm PCB non-PCB Transformer

Since no PCB's were detected in samples 1, 2 or 3 and only 1.5 ppm PCB was detected in Sample 4, all four devices qualify as non-PCB transformers.

Attached you will find copies of the sample Chain of Custody list and the Laboratory Analysis data sheet. A copy of these test results is to be kept on file in Silver City for possible inspection by EPA or the State of Utah.

Please contact me with your questions.

UTILITY TESTING LABORATORY

,875 SO. CHESTNUT ST. P. O. BOX 25005 SALT LAKE CITY, UTAH 84125 PHONE: (801) 973-8305

OCTOBER 28, 1994

E.M.S.
SUITE 103
ATTENTION: MR. TOM GAST
2301 RESEARCH BLVD.
FORT COLLINS , CO 80526

SUBJECT: ORDER NO. NORTH LILY 0001 RELEASE DATE: 28 OCT 1994 PCB TESTS ON SUBJECT SAMPLES

TESTING PERFORMED PER THE FOLLOWING METHODS:

EPA METHOD 600/4-81-045 (OIL), SW846-8080 (SOIL),

AND EPA METHOD 608 (WATER)

METHOD DETECTION LIMITS:

1 mg/Kg IN OIL, 1 mg/Kg IN SOIL AND 1μ g/L IN WATER

GENTLEMEN:

FOLLOWING ARE THE TEST RESULTS ON YOUR SUBJECT SAMPLES:

TEST NO. 10-21-94-03	OIL SAMPLE S/N NL#1(NO. LILY)	RESULT OF TEST
10-21-94-04	OIL SAMPLE S/N NL#2(NO. LILY)	ND
10-21-94-05	OIL SAMPLE S/N NL#3(NO. LILY)	ND
10-21-94-06	OIL SAMPLE S/N NL#4(NO. LILY)	1.5 mg/Kg (1260) PCB

UTILITY TESTING LABORATORY

D. M. Thorsen

A Utility Testing Laboratory

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		Phone: 801-973-8305	ysis																	SEND REST		To the attention of: \mathcal{E} , \mathcal{H} . \mathbb{S}	1		Fax:
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EMS 1413 West 57th Street Loveland, CO 80538 970/461-0571 fax 970/461-0591 e-mail: TGast99@aol.com

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	. 4900.	≫ hgs	
er City NOV	Pages:	/O A pgs	
1 Gast	Date:	10/21/99	
e Flechner	Fax:	520 / 882-4100	
	re Flechner		

Steve and Gene:

I finally was able to speak with Paul Spor. He informed me that there have been no releases from the process ponds since he started with the project in 1991. He did provide details of a wash out which was reported, cleaned up and may explain the sediment in the NOV.

If you choose to send this; the fax numbers are:

D. Wayne Hedberg and Mary Ann Wright 801 / 359 - 3940

Dennis Frederick 801 / 538 - 6016

EXHIBIT

6

Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-538-7223 (TDD)

November 16, 1999

CERTIFIED RETURN RECEIPT P 074 976 784

Mr. Stephen E. Flechner, President and CEO North Lily Mining Company 1800 Glenarm Place, Suite 210 Denver, Colorado 80202

Re: Finding of Non-Compliance, Results of Meeting with North Lily Mining Company, Tintic Project, M/023/007, Juab County, Utah

Dear Mr. Flechner:

This letter is a follow up to our meeting of November 10, 1999. In that meeting, you, Mr. Gene Webb, and your consultants met with our Minerals program staff and Division of Water Quality representatives regarding separate notices of non-compliance which were sent formally to North Lily Mining Company several weeks prior.

After meeting with North Lily and discussing the on-the-ground situation, I am upholding the earlier Notice of Non-Compliance sent to your office on October 12, 1999. As we discussed at the conclusion of that meeting, by 5:00 p.m. on November 22, 1999, North Lily Mining Company must:

1. Submit a detailed plan describing how the company will stabilize and maintain the site to address the Findings of Non-Compliance as outlined in the October 12, 1999 letter.

The detailed plan should address the following concerns:

Water balance calculations that estimate the amount of water currently held in the heap and ponds. A demonstration that the ponds will adequately contain all existing solutions plus any additional draindown or runoff caused by a significant rainfall event(s) and any spring snowmelt. Page 2 Stephen Flechner M/023/007 November 16, 1999

- Plans for treating and/or disposing of the process water pond solutions presently contained in the ponds. A plan for correcting the structural integrity of the pond and pad liners to allow continued use, or an alternate plan for collection, storage and treatment of these solutions.
- Clean up the site to dispose of miscellaneous trash and debris, repair the pond liners in 2. critical areas and perform appropriate ditch maintenance.

A site visit will be scheduled in early December with Division staff to inspect the clean up results as outlined above.

Please understand that the consequences of non-compliance remain as outlined in the October 12, 1999 Notice. North Lily's failure to comply with the requirements within the time frame specified in this letter will result in issuance of a formal Notice of Agency Action. North Lily may appeal this Finding of Non-Compliance, you may contact Ms. Tiffini Moss, Executive Secretary, at 801-538-5304 within 10 days of your receipt of this letter to schedule an informal conference before the Division Director. If you have any questions regarding this letter, please call me at (801) 538-5306, or Wayne Hedberg at 801-538-5286.

Sincerely,

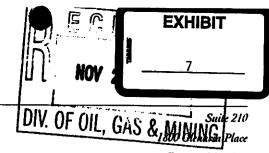
Mary Ann Wright
Associate Director, Mining

jb

Tom Gast, EMS cc: Fred Pehrson, DWQ

Director, DOGM

o:\action\m023007.fndg



November 22, 1999

Denver, CO 80202 Tel: 503.294.0427

Fax: 505.295.2255

Mr. D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program
State of Utah
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, Utah, 84114

Re: Notice of Non-Compliance, North Lily Mining Company, Tintic Project M/023/007, Juab County, Utah.

Dear Mr. Hedberg;

This letter is intended to be fully responsive to the information requests contained in your letter of October 12, 1999 and Mary Ann Wright's letter dated November 16, 1999. North Lily Mining Company believes that it has always been cooperative in its relationship with DOGM and it is the Company's intention to operate in a responsible manner in accord with applicable regulations, rules, stipulations, and permit conditions. The information below is presented in the sequence of DOGM's requests.

By November 22, 1999, North Lily Mining Company must submit a detailed plan describing how the company will stabilize and maintain the site to address the findings of Non-Compliance as outlined in the October 12, 1999 letter.

These matters are discussed below.

1. <u>Section R647-4-107.1 Operation Practices</u> - requires the operation to minimize hazards to the public safety and welfare. Due to the presence of dead animals noted during recent staff inspections (2 dead birds and a dead sheep), the questionable water quality of the pad effluent, and the insecure nature of the site (wide open gates leading to process ponds and heap), the Division feels public safety and welfare is compromised.

North Lily and DOGM have agreed that the issue of site security has been resolved such that the facility does not represent a hazard to public safety and welfare.

2. <u>R647-107.2. Drainages</u> – requires the operator to take appropriate measures to avoid or minimize environmental damage to natural drainage channels. To date, there have been a number of unauthorized releases of contaminated water leaving the process

water ponds and traveling offsite through a culvert located west of the site and under State Highway 6 to adjacent undisturbed areas.

The company is unaware of any unauthorized releases of contaminated water leaving the process water ponds such that the releases resulted in environmental damage to natural drainage channels. There have been no releases from the process ponds since 1991 (the period of history available to current management). There was a wash out in 1997 that resulted in heap material being washed from the pad. This release was properly reported and cleaned up to the satisfaction of DOGM and DWQ.

During our recent meeting, it was learned that there was fluid being pumped from the overflow pond on or around September 18, 1997. The photos show that the sump pump was being used for the pumping and the fluid was being pumped under Highway 6 to the approved land application site. To the best of North Lily staff recollection, the fluid being pumped was rainwater deposited directly into the overflow pond after the overflow pond was previously emptied of effluent as a part of the approved land application process. The pumping capacity of the sump pump is such that the land application discharge system could not be sufficiently pressurized to allow sprinkler application so the rainwater was pumped from the overflow pond sump through a hose and under Highway 6. Support for this recollection is provided by 1) the photo taken the same day that shows that the preg and barren ponds were empty and, 2) the small quantity of fluids present in the overflow pond. Had this issue been addressed in 1997 when discovered, it would have been resolved then rather than relying upon our mutual recollections over two years later.

<u>Process Ponds</u> - Given the current deteriorated condition of the process ponds (and the volume of impounded solutions), it is doubtful these facilities will successfully retain the amount of additional effluent/runoff that may be produced when a significant precipitation event (or spring snowmelt) occurs. We believe that the capacity and integrity of these containment facilities will be breached leading to uncontrolled discharges of solutions.

North Lily has been aggressively evaporating fluids since August. These efforts have been successful with pond fluid volumes being reduced from approximately 1,000,000 gallons at August 18, 1999 to about 700,000 gallons at September 9, 1999 and less than 100,000 gallons at November 10, 1999. This is less than 10% of the fluid inventory when compared with the period of active leaching. This is also less than 10% of the fluid inventory of November 1998 (see DOGM inspection photographs). This successful evaporative effort is attributed to active fluid management including the addition of misters and good weather.

3. <u>R647-4-107.3. Erosion Control</u> - There is evidence of significant erosion on the heap leach pad where processed, contaminated ore has slumped blocking the solution conveyance ditches. This is causing potential environmental and heap stability problems and uncontrolled discharge of process solutions.

There is some slumping of the graded heap surface at three or four specific locations that may be impeding flow in the solution conveyance ditches. These areas will be dug out in December to restore direct solution flow to the ponds. The slumps will be repaired as a part of final grading and prior to placement of topsoil on the heap surface.

4. <u>R647-4-107.4. Deleterious Materials</u> - deleterious material (i.e. pad effluent) is potentially leaving the site by way of compromised liners both associated with the pad and the process water ponds. The presence of several opened electrical transformers on the east side of the heap leach pad raises the question of possible PCB contamination.

North Lily implemented a program of maintenance to repair tears in the pond liners in September. Repairs have been made to the seam tear in the overflow pond, to other damaged areas in the overflow pond and to the spillway between the barren pond and the overflow pond. The repairs to the spillway from the pad to the preg pond have begun and this work will be completed by early December, weather permitting. All repairs are being completed in accordance with procedures recommended by the liner manufacturer and approved adhesives are being used.

North Lily and DOGM have agreed that the transformers were tested in 1994 and found to be non-PCB transformers.

Issues to be additionally addressed are discussed below.

Water balance calculations that estimate the amount of water currently held in the heap and ponds. A demonstration that the ponds will adequately contain all existing solutions plus any additional draindown or runoff caused by a significant rainfall event(s) and any spring snowmelt.

North Lily estimates that there is less than 200,000 gallons of active fluids in the system at November 19, 1999. This estimated quantity includes about 80,000 gallons in the preg pond, 20,000 gallons in the barren pond and less than 100,000 gallons subject to drain down. Pumping was suspended on several occasions during the past month and drain down is estimated at 25 gallons per minute, 36,000 gallons per day or 72,000 gallons for the 48-hour standard measurement of "available" drain down.

The pond capacities according to company measurements are listed below.

Pond	Capacity (US Gallons)				
Preg Pond	894,608				
Barren Pond	1,113,024				
Sub-total Sub-total	2,007,632				
Overflow Pond	1,529,728				
Total Pond Capacity	3,537,360				

The 100 year, 24-hour storm was calculated by SRK, the project's design engineers, to be 2.8 inches. Coupling this hypothetical storm with snowmelt containing 1 inch of moisture



results in 3.8 inches of moisture over the approximate 16-acre site. Further assuming that all of this moisture reports to the ponds, a total of 1,655,000 gallons of fluids would be added to the existing inventory of 200,000 gallons resulting in a storage requirement of about 1,855,000 gallons. This quantity can be stored in the preg and barren ponds. In the event that additional storage is required, North Lily would request timely permission from DWQ to temporarily utilize the 1.5 million gallon capacity overflow pond. Thus it is believed that the ponds will adequately contain all existing solutions plus any additional drain down or runoff caused by a significant rainfall event(s) and any spring snowmelt.

Plans for treating and/or disposing of the process water pond solutions presently contained in the ponds. A plan for correcting the structural integrity of the pond and pad liners to allow continued use, or an alternative plan for collection, storage and treatment of these solutions.

North Lily Mining Company has implemented a program that has resulted in substantially reduced fluid volumes in storage. The company has also completed necessary repairs to the pond and pad liners to allow continued use. Additional maintenance is scheduled during the next several weeks.

During the next construction season, North Lily will evaporate or land apply (subject to agency approval) remaining fluids; design and receive approval for construction of a biopass system or alternative; correct areas of slumping and rill erosion; maintain the solution ditches; remove the surface structures and equipment; final grade the facility; apply topsoil, fertilizer, seed and mulch; and, perform ongoing necessary maintenance until the facility is deemed closed and stable (by agreement between North Lily, DOGM and DWQ).

Please feel free to contact either Tom Gast of Environmental Management Services Company (970/461-0571) or me if additional information can be provided.

Sincerely,

Stephen E. Flechner President and CEO

Cc: W. Gene Webb, Executive Vice-President, NLMC Mary Ann Wright, Associate Director, DOGM Dennis Frederick, DWQ

Beth Wondimu, DWQ

Tom Gast, EMS

Michael O. Leavitt Kathleen Clarke **Executive Director** Lowell P. Braxton Division Director

1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax) 801-538-7223 (TDD)

December 16, 1999

TO:

Minerals File

FROM:

Doug Jensen, Reclamation Specialist

RE:

Site Inspection, North Lily Mining, North Lily Mine, M/023/007, Juab County, Utah

Date of Inspection:

November 24,1999

Time of Inspection:

10:00 AM

Conditions:

Clear and cold

Participants:

Elwin Ewell, North Lily Mining; Beth Wondimu, Division of Water Quality; and

Doug Jensen, DOGM

Purpose of Inspection: Check changes in site condition since August 8,1999 inspection

This inspection was made to assess changes in the site as a result of the Notice of Non-Compliance issued to North Lily Mining on October 12,1999. Beth accompanied me on this inspection for first hand viewing of site conditions in relation to the Notice of Violation and Order issued by the Division of Water Quality on October 19,1999.

We arrived at the site at 9:30 am; before entering the site we drove to the topsoil area above the site to check to see if the transformers stored in this area had been moved. The transformers were still where they were during the October site visit.

At the office, Mr Ewell was waiting for us to arrive. We discussed what we wanted to see during the visit. Mr. Ewell accompanied Beth and myself on the tour.

We accessed the site through the back door of the office. The first area we viewed was the preg pond. The pond was approximately one third full, Mr. Ewell indicated that they turned the pumps on every four or five days. The sprays were not running at the time of the visit. Mr Ewell stated that the pond refilled at a rate of about a foot a day when the pumps were shut down. The preg pond liner condition was essentially the same as in past visits. There were still several areas where the holes in the primary liner extended below the water surface. There was no evidence that any attempt had been made to repair any of the holes that were evident in the past. I found no evidence of the sprays that had been placed around the pond to enhance the evaporation of solutions. These were mentioned during the November 10 meeting with North Lily representatives. (Pictures taken)

Page 2 Site Inspection M/023/007 December 16, 1999

We next walked up to the top of the pad. The spray line configuration was essentially the same as it had been in past visits. The ditches around this area showed no evidence of any work being done to facilitate flow in the ditches. Several areas on top of the heap showed evidence that solutions were still running off the heap to areas where no solution conveyances presently exist. While we were on the top of the heap, I inspected the spray heads. I was looking for the mister type spray-heads mentioned in the November 10 meeting. The spray-heads were all the wobbler type of sprays that have been on the heaps since our visit in October. The orifices in these sprays were large which result in a large droplet spray, not very conducive to evaporation. Viewing the salt build-up that marked the active spray area, I could not see where any other portion of the heap had received any significant amounts of solution recently.

The next place we walked to was the southwest corner pad to check the ditches in this area. Again this area showed little evidence of work being done to correct drainage problems. One area, where there had been a washout that had blocked the ditch, water was still standing behind the blocked portion of the ditch (picture taken). A narrow ditch had been dug through the material blocking the ditch but the water standing water was not draining through it. There was an area between the edge of the pad containment and out past the fence surrounding the pad that was wet with a salt build-up, indicating that water was leaving the pad in this area. The narrow ditch was the only change to this area that I could see since the last inspection.

We then walked along this ditch towards the plant. There were several holes in the ditch liner along this area that were wet and salt encrusted. There was no evidence of any repair efforts in this area.

The next area inspected was the overflow and barren ponds. Small patches had been placed on the secondary liner in several areas. An area where the glue had failed in a seam of the secondary liner in the overflow pond had been repaired. None of the other seams located in the barren or overflow ponds secondary liners were inspected on this visit. Complete inspection of the seams in the barren pond would be difficult, as a portion of the primary liner is still in place obscuring the secondary liner. The secondary liner of the spillway between the overflow and barren pond had been repaired. The primary liners in the barren and overflow ponds are damaged to the point that they are no longer a factor in the containment systems of this facility. The primary liner in the preg pond has deteriorated to a point that, even with extensive repairs, containment will be questionable.

There is presently no way to monitor any of the ponds for leakage. The approved monitoring system was placed between the primary and secondary liners. Because of the deterioration of the primary liner in the ponds, the leak detection system is no longer viable. There is a question as to the competency of the secondary liners of the ponds, due to breaches found during past site visits.

The inspection tour ended at this point and we returned to Salt Lake.

jb m23-07.ins



9

Michael O. Leavitt Governor Kathleen Clarke Executive Director Lowell P. Braxton Division Director 1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax) 801-538-7223 (TDD)

December 20, 1999

TO:

Minerals File

FROM:

Doug Jensen, Reclamation Specialist

RE:

Site Inspection, North Lily Mining Company, Tintic Project, M/023/007, Juab County,

Utah

December 7, 1999

Date of Inspection: Time of Inspection:

9:30 A.M.

Conditions:

Cloudy and cool

Participants:

Gene Webb, Steve Flechner, Elwin Ewell, North Lily Mining; Tom Munson, Lynn

Kunzler, and Doug Jensen, DOGM

Purpose of Inspection: To review mitigation of Non-compliance issues.

We arrived on the site at 9:30 A.M. and drove to the office where Mr. Ewell was awaiting our arrival. Mr. Webb and Mr. Flechner arrived shortly after our arrival. After a short discussion we began a tour of the site. The man-gate above the office was locked and had to be opened to provide access to the pad and pond area.

The first area inspected was the top of the pad. The sprays were running at the time of our visit and the preg pond was about one third full. The spray application area was ice covered with small "ice castles" around the wobbler risers. The depth of the ice build-up on the pad was hard to estimate but a portion of the water inventory was contained in the ice. The spray application area was the same area that was being covered during the visit in September.

Tom Munson inquired about the misters alluded to in the November 10th meeting with North Lily representatives. Mr. Webb directed our attention to an area to the South of the present application where a length of ½ inch poly-pipe several hundred feet long, had been placed with several small sprays attached. Mr. Ewell noted that holes had been punched in the pipe to provide additional spray capacity. Mr. Webb stated that this was the area they added to the system to aid in the evaporation of the 700,000 gallons of solution inventory. This added portion of the sprays was not running at the time of the visit. There was a noted absence of any salt build up, which surrounds the old spray areas, in this new spray area.

The next area visited was the Southeast corner of the pad to inspect efforts to remove materials that had slumped into the ditches. There had been no change since my visit on October 24, 1999. Water was still backed up in the ditch above the blockage. The small ditch that had been opened through

Page 2 Site Inspection M/023/007 December 20, 1999

the blockage was still evident but it still was not draining the water being held in the ditch above the blockage. The area off the containment in this area was still wet and salts were evident. Mr. Ewell stated that the wet area was due to the precipitation events that had taken place recently. This area has shown signs of solutions leaving the pad on every site visit since our visit on September 9, 1999. The work done to date has not alleviated this problem.

We walked along the East ditch to the overflow pond. The small ditch cut through the blockage on the South end of the ditch was the only recent work that I could see in any of the ditches.

The pond area was visited next. I could not see much change in these areas since my October 24th visit. Besides the holes in the primary liner of the preg pond, most of the obvious holes in the secondary liners in the barren and overflow ponds had been patched. None of the holes noted earlier in the preg pond had been patched to date.

A quick check of the process plant noted that all the components that were on site in September, remain. No change could be seen in this area or the areas surrounding the plant.

The site tour ended at this point and we left to continue our inspection tour of other sites.

jb M23-07-3.ins

Michael O. Leavitt Governor Kathleen Clarke Executive Director Lowell P. Braxton Division Director

1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax) 801-538-7223 (TDD)

February 14, 2000

TO:

Minerals File

FROM:

Doug Jensen, Reclamation Specialist

RE:

Site Inspection, North Lily Mining, North Lily Mine, M/023/007, Juab County, Utah

Date of Inspection:

February 14,2000

Time of Inspection:

9:30 AM

Conditions:

Cloudy, windy and cool

Participants:

Beth Womdimu, Division of Water Quality; Doug Jensen DOGM

Purpose of Inspection: Site conditions

We arrived at the site at 9:30 in the morning, there was no North Lily employees on site. The site had about three to four inches of snow. There had been traffic in the parking lot but there was no evidence that anyone had been out on the plant site since the snow fell. From what we could tell snow had fallen at least several days before our visit. The pump was running when we arrived and it is evident from the lack of foot-prints at the site, that the pump is presently running 24 hours a day.

This inspection was made to follow-up on several changes that were to have taken place since the November meeting with North Lily representatives. We were unable to check all the items due to the snow.

One of the items was that all the holes in the liners of the ponds and ditches were to have been repaired by December 1999. North Lily response to DWO (received January 11,2000) North Lily stated: "Other areas requiring repair including the primary spillway and punctures in the primary liners in the pregnant and barren ponds were identified as requiring repair. North Lily reports that these repairs were completed during December 1999 and that the liners will be inspected and promptly repaired during the remaining life of the facility." We visually inspected the preg pond for repairs and found that the breaches that were evident in the October inspection were still not repaired. I am unable to understand how North Lily will repair the primary liner in the barren pond, at the present time approximately 50% to 60% of that liner is in the bottom of the pond. This liner has been this way since DOGM's August visit and remains that way today.

The solution ditches do show that some effort has been made to open up a small area that had been blocked by material from the heap. This area is near the junction of the two solution ditches near the preg

Page 2 Site Inspection M/023/007 February 14, 2000

pond. A problem with the ditch that had been opened previous to our December visit was that it was not draining the area above it. This is still a problem, water is still backing up above this area. We were unable to ascertain if any water is leaving the pad at this point, as it was on all of our previous visits, due to the snow cover. We were also unable to check to see if the holes in the liners of the ditches, noted on our last visits, had been repaired.

The next area we checked was the ponds and their condition. The preg pond was +90% full and judging from the amount of solution flowing into the pond, the pumps are barely keeping up with the solution flow. I feel that once the weather warms up and melts the snow on the site that the preg pond will overflow into the barren pond. The barren pond had two to three feet of standing water. The overflow had about the same amount of water that was there on our December visit (about a foot).

The heaps was the next area visited. There was about an inch of snow on the heap at this time but the surface of the heap was very wet due to recent snowmelt. The sprays remain as they have been since our August visit. With the exception that several of the ½" lines on the heap are now just running water on the ground instead of to the wobblers (spray heads).

The ice build-up noted during our last visit has almost all melted except for some areas near the sprays. Some ponding of water was noted on top of the heap but the amount was not significant.

The inspection tour took approximately a half an hour and during that time no one was at the site except for Beth and myself. The inspection ended at this point and we returned to Salt Lake.

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